

# Top Ten Health Economics and Outcomes Research (HEOR) Trends: A booklet review

Ravi Shankar Pathiyil,<sup>a,c</sup> Anishma Karmacharya<sup>b,d</sup>

Submitted: 6 March 2018

Accepted: 14 June 2018

Published: 30 June 2018

Health economics and outcomes research (HEOR) is becoming increasingly important as governments and healthcare organizations deal with the problem of providing the best possible health outcomes at an affordable cost. The International Society for Pharmacoeconomics and outcomes research (ISPOR) is a leading professional society in this field. Recently a survey was conducted among ISPOR members who are experts in the fields regarding the top ten trends in HEOR predicted to have the maximum impact during 2018.

The top trends have recently been highlighted in a booklet published by ISPOR. The top ten trends identified are drug pricing and spending, innovative and curative therapies, accelerated drug approvals, universal health coverage, aging population, mHealth, diagnostics, biosimilars, preventive medicine, and disruptive innovators.

Drug prices constitute a large proportion of the healthcare budget. Indication-specific pricing is being increasingly recommended especially when drugs have both a high-value and a low-value indication. Specialty drugs are being developed more rapidly and while these are effective for a variety of conditions their high cost will put pressure on health systems.

Innovative and curative therapy is a transformational change to the health sector but it brings a high economic burden. In developing countries like Nepal, their high cost could put them beyond the reach of the majority of the population unless 'creative' drug financing mechanisms are put in place.

Accelerated drug approval mechanism has been initiated in many countries but the benefits have to be balanced against the risks especially in terms of patient safety and the initial pricing and reimbursement.

Universal health coverage is becoming increasingly common around the world. The first steps were taken in Europe following the Second World War but today most developing countries including Nepal are working towards this.

The aging world population creates unique challenges and the issue for health systems and countries is balancing cost and quality of care.

A number of applications on smart phones or devices which can connect to smart phones can continuously monitor individuals' vital parameters and generate an enormous amount of real-time data.

---

a - Professor, Department of Pharmacology

b - Lecturer, Department of Pharmacology

c - American International Medical University, Saint Lucia

d - Lumbini Medical College, Palpa, Nepal

## Corresponding Author:

Anishma Karmacharya

e-mail: [karmacharya.anishma@gmail.com](mailto:karmacharya.anishma@gmail.com)

ORCID: <https://orcid.org/0000-0003-4621-1041>

## How to cite this article:

Pathiyil RS, Karmacharya A. Top ten health economics and outcomes research (HEOR) trends: A booklet review. Journal of Lumbini Medical College. 2018;6(1):44-45. DOI: 10.22502/jlmc.v6i1.178. Epub: 2018 June 30



The challenge is learning to make better use of this data and to evaluate real-world evidence.

Diagnostics plays an important role in deciding which patients can benefit the most from advanced therapeutic modalities. HEOR will play an important role regarding decisions about the use and reimbursement of diagnostics.

A biosimilar has been defined as a biological medical product which is almost identical copy of an original product which has been manufactured by a different company. Biosimilars thus share similarities with generic medicines and while the cost saving may be lower compared to generics they still have the potential to save billions of dollars.

Chronic diseases are becoming common and a large proportion of the burden is borne by developing countries. Evaluating risk levels and targeting interventions appropriately can ensure cost-effective prevention.

The last trend is the development of disruptive technologies. These can range from gene editing using Clustered Regularly Interspaced

Short Palindromic Repeats (CRISPR), to Chimeric Antigen Receptors (CAR) T-cell therapies among others. Multiple criteria decision analysis in groups is recommended to make decisions regarding use of these technologies. This is similar to the personal drug selection process taught in schools around the world.

The booklet ends with references, a description of the process of developing the booklet and the individuals involved. This small but highly informative booklet will be of interest to all individuals interested in HEOR and is vitally important for a developing country like Nepal with resource constraints.

**ISPOR 2018 Top 10 HEOR trends** can be downloaded for free from <https://www.ispor.org/top10trends.pdf>

#### **Conflict of Interest:**

The authors declare that no competing interest exists.